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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/668,480

09/22/2003

Yuichi Atarashi

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27799

7590

11/13/2008

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EXAMINER

KHAN, USMAN A

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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/668,480	<b>Applicant(s)</b> ATARASHI ET AL.	
	<b>Examiner</b> USMAN KHAN	<b>Art Unit</b> 2622	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 18 July 2008.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-44 is/are pending in the application.
- 4a) Of the above claim(s) 8-44 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-7 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 22 September 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

***Response to Arguments***

Applicant's arguments filed on 07/18/2008 with respect to claim 1 has been considered have been considered but are not persuasive.

Please refer to the following office action, which clearly sets forth the reasons for non-persuasiveness.

Regarding **claim 1**, Applicant argues that Shinomiya in view of Ikeda do not teach including a lens portion to form an image of an object onto the optical pickup element, a leg portion to support the lens portion, and a contact portion to be brought in contact with the image pickup element" and "being provided so as to come in contact with a front surface of the image pickup element from the front surface of the base board through the opening portion. According to present invention, the optical member and the image pickup element are directly in contact with each other.

However, the examiner notes that the claim does not claim that "the optical member and the image pickup element are directly in contact with each other" without any intervening connections between the optical member and the image pickup element hence the teachings of Shinomiya in view of Ikeda still teaches the amended claims; even if the claims are amended as such the examiner would like to mention that as taught in figures 3A and 3B with items 5, 6, 10, and 11 making up the optical member including the lens set which directly contacts the image sensor 3; also column 4 line 45 – column 5 line 15 and column 3 lines 60 – 65 of Ikeda the single molded lens unit

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consisting of items 5, 6, 10, and 11 formed from resin come in contact with the surface of the image sensor.

Also, Applicant argues that Ikeda does not teach an optical member "being provided so as to come in contact with a front surface of the image pickup element from the front surface of the base board through the opening portion" as recited independent claim 1. Therefore, Ikeda does not remedy the above deficiencies of Shinomiya.

However, the examiner notes that the claim does not claim that "the optical member and the image pickup element are directly in contact with each other" without any intervening connections between the optical member and the image pickup element hence the teachings of Shinomiya in view of Ikeda still teaches the amended claims; even if the claims are amended as such the examiner would like to mention that as taught in figures 3A and 3B with items 5, 6, 10, and 11 making up the optical member including the lens set which directly contacts the image sensor 3; also column 4 line 45 – column 5 line 15 and column 3 lines 60 – 65 of Ikeda the single molded lens unit consisting of items 5, 6, 10, and 11 formed from resin come in contact with the surface of the image sensor.

#### **DETAILED ACTION**

Regarding objection to specification provided in the previous office action for failing to provide a descriptive title. Applicant has amended the title of the invention to overcome the objection to the specification.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1 – 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shinomiya (US PgPub 2001/0055073) in further view of Ikeda (US patent No. 5,783,815).

Regarding **claim 1**, Shinomiya teaches an image pickup device comprising: (a) a base board on which an opening portion is formed (figures 3, 4, and 6 – 9 item 1 with opening); (b) an image pickup element provided on a reverse surface of the base board so that at least a part of the opening portion is covered (figures 3, 4, and 6 – 9 item 9); (c) an optical member, the optical member configured for converging light incident on the image pickup element (figures 3, 4, and 6 – 9 item 6 or 10); and (d) an outer frame member provided on the base board to cover the optical member and the opening portion (figures 3, 4, and 6 – 9 items 4 and 5).

Shinomiya teaches most of the limitations of claim 1, However Shinomiya fails to teach a lens portion to form an image of an object onto the optical pickup element, a leg

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portion to support the lens portion, and a contact portion to be brought in contact with the image pickup element, the optical member being provided so as to come in contact with a front surface of the image pickup element from the front surface of the base board through the opening portion. Ikeda, on the other hand teaches a lens portion to form an image of an object onto the optical pickup element, a leg portion to support the lens portion, and a contact portion to be brought in contact with the image pickup element, the optical member being provided so as to come in contact with a front surface of the image pickup element from the front surface of the base board through the opening portion.

More specifically, Ikeda teaches a lens portion to form an image of an object onto the optical pickup element (figures 3A and 3B items 5, 6, 10, and 11 making up the lens set and sensor 3), a leg portion to support the lens portion (figures 3A and 3B item 6), and a contact portion to be brought in contact with the image pickup element (figures 3A and 3B item 11), the optical member being provided so as to come in contact with a front surface of the image pickup element from the front surface of the base board through the opening portion (figures 3A and 3B with items 5, 6, 10, and 11 making up the optical member including the lens which comes in contact with the image sensor 3; also column 4 line 45 – column 5 line 15);

One of ordinary skill in the art at the time the invention was made would have been motivated to incorporate the teachings of Ikeda with the teachings of Shinomiya because as stated in column 4 line 45 – column 5 line 15 Ikeda teaches that this

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configuration will reduce cost of the adjustment system and automatically adjust the focus in turn improving image quality.

Regarding **claim 2**, as mentioned above in the discussion of claim 1 Shinomiya in further view of Ikeda teach all of the limitations of the parent claim. Additionally, Shinomiya teaches that the optical member comprises a portion to be engaged that is fitted in the outer frame member to prevent that the optical member rotates about an optical axis of the optical member, and the outer frame member comprises an engaging portion that is fitted in the portion of the optical member (figures 3, 4, and 6 – 9 items 5 and 6 fitted or items 4 and 7 are fitted).

Regarding **claim 3**, as mentioned above in the discussion of claim 1 Shinomiya in further view of Ikeda teach all of the limitations of the parent claim. Additionally, Shinomiya teaches that the optical member comprises a first optical member that comes in contact with a surface of the image pickup element, and at least one auxiliary optical member which is stacked on the first optical member so that an optical axis of the auxiliary optical member agrees with an optical axis of the first optical member (figures 3, 4, and 6 – 9 item 7; along with the teaching of figures 3A and 3B with items 5, 6, 10, and 11 making up the lens set [which can also be considered an optical member and auxiliary optical member set]; also column 4 line 45 – column 5 line 15 of Ikeda).

Regarding **claim 4**, as mentioned above in the discussion of claim 1 Shinomiya in further view of Ikeda teach all of the limitations of the parent claim. Additionally, Shinomiya teaches that the base board has electric parts thereon for processing an image (figures 3, 4, and 6 – 9 item 10).

Regarding **claim 5**, as mentioned above in the discussion of claim 1 Shinomiya in further view of Ikeda teach all of the limitations of the parent claim. Additionally, Shinomiya teaches that the prescribed electric parts are arranged on the base board that is covered by the outer frame member (figures 3, 4, and 6 – 9 item 10).

Regarding **claim 6**, as mentioned above in the discussion of claim 4 Shinomiya in further view of Ikeda teach all of the limitations of the parent claim. Additionally, Shinomiya teaches that at least a part of the electric parts is arranged in the vicinity of a fixed position at which the outer frame member is fixed (figures 3, 4, and 6 – 9 item 10).



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Regarding **claim 7**, as mentioned above in the discussion of claim 4 Shinomiya in further view of Ikeda teach all of the limitations of the parent claim. Additionally, Shinomiya teaches that a photoelectric conversion section is provided on the front surface at a position corresponding to the opening portion to convert incident light to an electric signal, and the optical member is arranged to focus an object image by converging the incident light onto the photo-electric conversion section (figures 3, 4, and 6 – 9 item 9 and paragraph 0044).

### ***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Usman Khan whose telephone number is (571) 270-1131. The examiner can normally be reached on Mon-Thru 6:45-4:15; Fri 6:45-3:15 or Alt. Fri off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Ometz can be reached on (571) 272-7593. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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11/07/2008  
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